



January 30, 2018

DENNIS & BARB MASHEK
1701 253RD AVENUE
CALMAR IOWA 52132

SUBJECT: Animal Feeding Operation (AFO) Compliance Inspection for:
- Mashek Dairy, County – Winneshiek, Facility #68162

Dear Mr. & Mrs. Mashek:

Attached is a copy of the report resulting from the Animal Feeding Operation (AFO) facility compliance inspection conducted on January 26, 2018.

Your attention is directed to the recommendations portion of the report.

If you have any questions, or feel this report does not represent the conditions at your facility, please call me at 563/927-2640.

The cooperation and assistance provided by you and Josh Mashek during the inspection is appreciated.

Sincerely,

Chris Gelner, Environmental Specialist
christopher.gelner@dnr.iowa.gov
Field Services and Compliance Bureau

c: -Stephen Pollard, U.S. EPA Region 7, WWPD/WENF, 11201 Renner Blvd., Lenexa, KS 66219
-Ken Hessenius, FO#3, AFO Enforcement Coordinator, Spencer, IA

enc: -AFO Facility Inspection Report
-MMP Inspection Form
-Animal Feeding Operation (AFO) Regulatory Status Form
-Aerial Photos of Site

Efile: 96 AFO Calmar 68162 Mashek Dairy 012618 Inspection csg

IOWA DEPARTMENT OF NATURAL RESOURCES AFO INSPECTION REPORT

FACILITY DESCRIPTION

FACILITY LOCATION	Facility: Mashek Dairy			Facility ID#: 68162	
	Address: 1701 253 rd Avenue		City: Calmar	State: IA	Zip: 52132
	PLSS: Section 33, Calmar Township (T97N, R09W), Winneshiek County				
OWNER	Name: Dennis & Barb Mashek				
	Address:		City:	State:	Zip:
ANIMAL HOUSING TYPE	<input type="checkbox"/> Confinement <input type="checkbox"/> Open Lot <input checked="" type="checkbox"/> Combined (Confinement & Open Lot)				
ANIMAL INFORMATION	Animal Type(s)	Capacity	Current Head	Number of Bldgs./Pens	
	Dairy – Mature Conf.	445	445		
	Dairy – Immature Conf.	140	140	5/2	
	Dairy – Immature Openlot	175	175		
Date of Construction: 1928			Dates of Expansion: Vairous		

INSPECTION INFORMATION

INSPECTION DATE	This Inspection 01/26/2018		Last Inspection: N/A
PERSONS INTERVIEWED	Name: Dennis Mashek		Title: Facility Contact
	Name: Josh Mashek		Title: Contact
NEAREST WATERCOURSE	Stream Name: Unnamed Tributary to Turkey River		
	Description of Flow Path: West about 1,170 ft to UT Turkey River		

COMPLIANCE SUMMARY

OBSERVATIONS	Nutrient Management: <input type="checkbox"/> CNMP <input type="checkbox"/> NMP <input checked="" type="checkbox"/> MMP <input type="checkbox"/> Other <input type="checkbox"/> No formal plan		
	Manure Stockpiling: <input checked="" type="checkbox"/> In controlled area <input type="checkbox"/> In compliance with rules <input type="checkbox"/> Not applicable – direct haul <input type="checkbox"/> Stockpiling in an uncontrolled area	Mortality Management: <input type="checkbox"/> Rendering <input checked="" type="checkbox"/> Composting <input type="checkbox"/> Incineration <input type="checkbox"/> On-site burial <input type="checkbox"/> Landfill	Runoff from Feed Storage: <input type="checkbox"/> No outdoor feed storage area <input checked="" type="checkbox"/> Discharge from feedstock storage area is controlled <input type="checkbox"/> Feed storage is located in an uncontrolled area
	Clean Water Diverted: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Discharge to a Water of the U.S. via Manmade Conveyance: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Direct Animal Contact with Waters of the U.S.: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
	Adjacent Facilities (by same owner/operator): <input type="checkbox"/> Confinement <input type="checkbox"/> Open Lot <input checked="" type="checkbox"/> None		
	Evidence of Discharges: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
	NPDES PERMIT STATUS		
COMPLIANCE STATUS	The facility, as observed during the inspection, was a Medium AFO and did not need an NPDES permit. NPDES permit is required: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No This facility appeared to be in compliance with Iowa's environmental regulations at the time of the inspection. Actual conditions may vary over time with the operation and maintenance of the facility. Facility is in compliance: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		

AUTHENTICATION	Inspector: <i>Chris Blair</i>	Date: 1/29/18	Reviewer: <i>B. Jensen</i>	Date: 1/29/18
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IOWA DEPARTMENT OF NATURAL RESOURCES
AFO INSPECTION REPORT

FACILITY EVALUATION

Facility

This facility consists of (3) confinement buildings housing a capacity of 445 mature dairy cows and 140 immature dairy heifers. The facility also has a capacity to house 175 immature dairy heifers in open feedlot pens. Manure from the confinements is stored in a circular concrete pit and manure from the open feedlots is stored in deep bedding pack before hauling to the fields. Manure structures were observed during the inspection and no discharge was noted. Mortalities are disposed of by composting. Mr. Dennis Mashek and Mr. Josh Mashek were present and interviewed during the inspection.

Manure Management Plan (MMP)

The MMP and manure application records were reviewed during the inspection. No deficiencies were noted.

Feedstuffs

During the inspection it was noted that all feedstuffs are stored in a commodity building or under plastic to reduce runoff and potential violations of state water quality standards. Be aware that feedstocks have the potential to cause water quality violations and these areas should be monitored regularly for discharges. Paragraph 567 Iowa Administration Code 61.3(2) outlines general surface water quality criteria and requires that all surface waters be free from wastewater discharges or agricultural practices that produce stream conditions with objectionable color, odor or other aesthetically objectionable conditions.

Open Feedlot Stockpiling

Mr. Mashek pointed out that the east calf open feedlot building is scraped and temporarily stockpiled to the east of the building. This area appears to have some run-on issues. It is recommended that this area be redesigned to prevent run-on to the stockpile and run-off from the stockpile from leaving the site. No evidence of waste reaching a water of the state was observed.

Dead Animal Composting

Dead animals are disposed of by composting. During the facility inspection the uncovered compost area was observed. Wood shavings are used as bulking agent. No evidence of compost leachate runoff leaving the compost area or ponding water in the area was observed. As a reminder, livestock mortalities must be incorporated into the composting process within 24 hours after death. The compost must be maintained with an adequate base layer (from 12 to 24 inches thick, depending on the size and number of mortalities), with 6 to 12 inches between carcasses, and an additional 12 inches of cover material around carcasses at all times. Cover should be maintained to control runoff and to prevent access by scavenging animals. This part of the operation should be inspected frequently. It appears that some run-on water is entering the compost area. It is recommended that this area be evaluated to limit run-on and therefore run-off from the compost facility. Additional recommended resources are included.

Bio-Security

Prior to the inspection, bio-security was discussed with Mr. Mashek and it was agreed upon that DNR bio-security SOP would be followed. DNR bio-security SOP was followed during the inspection.

RECOMMENDATIONS

- Regularly walk around the facility to monitor for discharges and needed repairs.
- Contact Iowa State Extension Ag Engineer, NRCS, or a private consultant to discuss potential risks and mitigation options particularly with the stockpile area and the compost area (contact information attached).

SUMMARY

- The facility, as observed, was considered a Medium AFO based on the capacity of animals at the animal feeding operation.
- No discharge was observed during the inspection and no evidence of past discharge was observed.
- No NPDES permit is required at this time.



IOWA DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL SERVICES DIVISION



Field Office #1 909 W Main Ste 4 Manchester IA 52057 563-927-2640	Field Office #2 2300 15 th St SW Mason City IA 50401 641-424-4073	Field Office #3 1900 N Grand Ave Spencer IA 51301 712-262-4177	Field Office #4 1401 Sunnyside Ln Atlantic IA 50022 712-243-1934	Field Office #5 7900 Hickman Rd Ste 200 Windsor Heights IA 50324 515-725-0268	Field Office #6 1023 W Madison Washington IA 52353 319-653-2135
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Manure Management Plan Compliance Review – Nonsales of Manure

Site Visit Date Current: 01/26/2018 Last: N/A	Number of Animals: 585	Animal Units: 763	N-based <input type="checkbox"/> P-based <input checked="" type="checkbox"/>	Facility Location County: Winneshiek	Facility ID: 68162
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Facility Tier Status	1	2	3	Violation(s) Comments
Pre-visit:	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Post-visit:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Clerical Violation(s) <input type="checkbox"/> Technical Violation(s) <input type="checkbox"/>				

Facility Name Mashek Dairy Person(s) Contacted Dennis Mashek Phone 563/562-3763

Facility Owner Information & Address Unchanged? Yes ☒ No ☐ (Database must be updated)

Address of Facility: 1701 253rd Avenue, Calmar, Iowa 52132

Do you own or operate any other animal feeding operation within 2,500 feet? ☐ Yes ☒ No

MMP Contents		Are requirements being met for the following items?		
		Yes	No	N.A.
a.	Calculations to determine land area for application [65.17(4)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b.	Total nitrogen and phosphorus available, credits, application losses [65.17(5)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c.	Optimum crop yield, crop usage rate, and soils maps [65.17(6)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d.	Manure application methods and timing of application [65.17(7)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e.	Location of manure application and landowner agreements [65.17(8)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f.	Estimate of annual animal production and amount of manure produced [65.17(9)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g.	Methods, structures, or practices to reduce soil loss and potential surface water pollution (conservation plans for highly erodible land) [65.17(10)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h.	Does P Index no. generated correspond with P Index no. in plan? [65.17(17)]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i.	Are proper soil sampling methods being used to calculate P Index? [65.17(16)]	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Records Review		Are requirements being met for the following items?		
		Yes	No	N.A.
j.	Copy of the current MMP [65.17(12)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
k.	Records kept for 5* years (or crop rotation if longer) maintained [65.17(13)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
l.	Methods of application [65.17(13)a)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
m.	Dates when manure was applied [65.17(13)b)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
n.	Location of manure application and number of acres [65.17(13)c)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
o.	Manure application rate [65.17(13)c)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
p.	Statement of Intent for fields not owned or rented [65.17(13)e]	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Field Observations of Manure Storage/Handling/Application & Animal Disposal		Are requirements being met for the following items?		
		Yes	No	N.A.
q.	Manure storage structures appear to be properly operated & maintained [65.2&65.15]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
r.	Dead animals disposed of properly [567 IAC 100.4(455B) & Code of Iowa 167.18]? Type: Compost <input checked="" type="checkbox"/> Incinerator <input type="checkbox"/> Burial <input type="checkbox"/> Rendering <input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion Items:		Were the following items discussed?		
		Yes	No	N.A.
s.	Manure release notification made within 6 hours [65.2(9)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
t.	Deficiencies, violations, and tier status?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
u.	Recommendations, improvements, environmental issues?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
v.	Manure applicator is certified [65.19]? Applicator name/number:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
w.	Proper manure application [65.3(2)-(3)]?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments Manure application is conducted during the spring and fall by NEIA Pumping Service, Inc – CMS 1982.

SPECIALIST NAME Chris Gelner ON-SITE CONTACT Dennis Mashek DATE 01/26/2018



Animal Feeding Operation (AFO) Regulatory Status

Facility Name: Mashek Dairy Facility ID: 68162 County: Winnebago

- ☐ Large CAFO – Discharging – NPDES Permit Required
- ☐ Large CAFO – No discharge – No NPDES Permit Required
- ☐ Large CAFO – Has NPDES Permit
- ☐ Medium CAFO – NPDES Permit Required
- ☒ Medium AFO – No NPDES Required
- ☐ Medium AFO – Has NPDES Permit
- ☐ Designated CAFO – NPDES Permit Required
- ☐ Small AFO – No NPDES Permit Required

This determination was made based on conditions and observations made at the time of the inspection on 01/26/2018. Please note that the regulatory status of the facility can change if conditions at the facility change or are different from those documented during the inspection.

Inspector: Chris Belser Date: 1/29/18

Regulatory Definitions of Large CAFOs, Medium CAFOs, and Small CAFOs

These regulatory definitions are from the Code of Federal Regulations (CFR), implementing the federal Clean Water Act.

A **Large CAFO** confines at least the number of animals described in the table below.

A **Medium CAFO** falls within the size range in the table below and either:

- “(A) Pollutants are discharged into waters of the United States through a man-made ditch, flushing system, or other similar man-made device; or
- (B) Pollutants are discharged directly into waters of the United States which originate outside of and pass over, across, or through the facility or otherwise come into direct contact with the animals confined in the operation.” 40 CFR 122.23(b)(6)(ii)

If an operation is found to be a significant contributor of pollutants to waters of the United States, the permitting authority may designate a medium-sized facility as a CAFO as provided in 40 CFR 122.23(c).

A **Small CAFO** confines the number of animals listed in the table and has been designated as a CAFO by the permitting authority after determining that it is a significant contributor of pollutants to waters of the United States as provided in 40 CFR 122.23(c).

Animal Sector	Size Thresholds (number of animals)		
	Large CAFOs	Medium CAFOs	Small CAFOs
cattle or cow/calf pairs	1,000 or more	300 – 999	less than 300
mature dairy cattle	700 or more	200 – 699	less than 200
veal calves	1,000 or more	300 – 999	less than 300
swine (weighing over 55 pounds)	2,500 or more	750 – 2,499	less than 750
swine (weighing less than 55 pounds)	10,000 or more	3,000 – 9,999	less than 3,000
horses	500 or more	150 – 499	less than 150
sheep or lambs	10,000 or more	3,000 – 9,999	less than 3,000
turkeys	55,000 or more	16,500 – 54,999	less than 16,500
chickens other than laying hens (other than a liquid manure handling system)	125,000 or more	37,500 – 124,999	less than 37,500
laying hens (other than a liquid manure handling system)	82,000 or more	25,000 – 81,999	less than 25,000

Mashek Dairy
1701 253rd Avenue
Calmar, Iowa 52132
Facility ID# 68162

